504611091 10/25/2017

PATENT ASSIGNMENT COVER SHEET

Electronic Version v1.1 Stylesheet Version v1.2 EPAS ID: PAT4657804

SUBMISSION TYPE:	NEW ASSIGNMENT
NATURE OF CONVEYANCE:	ASSIGNMENT

CONVEYING PARTY DATA

Name	Execution Date
KEN KRIEGER	08/03/2017
ANDREW JOSEPH ALEXANDER GILDFIND	07/14/2017
NICHOLAS SALVATORE ARINI	07/14/2017
SIMON MICHAEL ROWE	07/14/2017
RAIMUNDO MIRISOLA	10/25/2017
GAURAV BHAYA	07/17/2017
ROBERT STETS	07/14/2017

RECEIVING PARTY DATA

Name:	GOOGLE INC.
Street Address:	1600 AMPHITHEATRE PARKWAY
City:	MOUNTAIN VIEW
State/Country:	CALIFORNIA
Postal Code:	94043

PROPERTY NUMBERS Total: 1

Property Type	Number
Application Number:	15638316

CORRESPONDENCE DATA

Fax Number:

Correspondence will be sent to the e-mail address first; if that is unsuccessful, it will be sent using a fax number, if provided; if that is unsuccessful, it will be sent via US Mail.

Email: ejahaj@foley.com,IPDocketing@foley.com

Correspondent Name: FOLEY AND LARDNER LLP
Address Line 1: 111 HUNTINGTON AVE

Address Line 2: SUITE 2500

Address Line 4: BOSTON, MASSACHUSETTS 02199

ATTORNEY DOCKET NUMBER:	098981-4953
NAME OF SUBMITTER:	JAMES DE VELLIS
SIGNATURE:	/James De Vellis/
DATE SIGNED:	10/25/2017

PATENT 504611091 REEL: 043948 FRAME: 0176

Total Attachments: 4

source=098981-4953_Assignment#page1.tif

source=098981-4953_Assignment#page2.tif

source=098981-4953_Assignment#page3.tif

source=098981-4953_Assignment#page4.tif

PATENT REEL: 043948 FRAME: 0177

ASSIGNMENT - WORLDWIDE

For good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each undersigned inventor (hereinafter referred to singly and collectively as "ASSIGNOR") has sold, assigned, and transferred, and by these presents hereby sells, assigns, and transfers, unto

Google Inc. 1600 Amphitheatre Parkway Mountain View, CA 94043

(hereinafter referred to as "ASSIGNEE") its successors and assigns, the full and exclusive right, title and interest for the United States, its territories and possessions, and all foreign countries in and to this invention relating to

AUTHENTICATION OF AUDIO-BASED INPUT SIGNALS

as set forth i	n this United States Patent Application
check one	[] executed concurrently herewith, [] executed on
	[X] Serial No. 15/638,316 Filed 6/29/2017

as well as in and to (a) all improvements and modifications of the above-identified invention or inventions, (b) the above-identified application and all other applications for Letters Patent of the United States and countries foreign thereto for above-identified invention or inventions and all improvements and modifications thereof, (c) all Letters Patent which may issue from said applications in the United States and countries foreign thereto, (d) all divisions, continuations, reissues, and extensions of said applications and Letters Patent, and (e) the right to claim for any of said applications the full benefits and priority rights under the Patent Cooperation Treaty, the Paris Convention and any other international agreement; such right, title, and interest to be held and enjoyed by ASSIGNEE, its successors and assigns, to the full end of the term or terms for which any and all such Letters Patent may be granted as fully and entirely as would have been held and enjoyed by ASSIGNOR had this Assignment not been made.

ASSIGNOR HEREBY AUTHORIZES ASSIGNEE to file patent applications in any or all countries on the above-identified invention or inventions in the name of the undersigned or in the name of ASSIGNEE or otherwise as ASSIGNEE may deem advisable under the International Convention or otherwise.

ASSIGNOR HEREBY AUTHORIZES AND REQUESTS the Commissioner of Patents and Trademarks to issue said Letters Patent to ASSIGNEE as assignee of the entire interest, for the sole use and benefit of ASSIGNEE, its successors and assigns.

ASSIGNOR HEREBY AGREES (a) to communicate to ASSIGNEE, its successors and assigns, or their representative or agents, all facts and information known or available to ASSIGNOR respecting said invention or inventions, improvements, and modifications including evidence for interference, reexamination, reissue, opposition, revocation, extension, or infringement purposes or other legal, judicial, or administrative proceedings, whenever requested by ASSIGNEE; (b) to testify in person or by affidavit as required by ASSIGNEE, its successors and assigns, in any such proceeding in the United States or a country foreign thereto; (c) to execute and deliver, upon request by ASSIGNEE, all lawful papers including, but not limited to, original, divisional, continuation, and reissue applications, renewals, assignments, powers of attorney, oaths, affidavits, and declarations, depositions; and (d) to provide all reasonable assistance to ASSIGNEE, its successors and assigns, in obtaining and enforcing proper title in and protection for said invention or inventions, improvements, and modifications under the intellectual property laws of the United States and countries foreign thereto.

ASSIGNOR HEREBY REPRESENTS AND WARRANTS that ASSIGNOR has the full and unencumbered right to sell, assign, and transfer the interests sold, assigned, and transferred herein, and that ASSIGNOR has not executed and will not execute any document or instrument in conflict herewith.

ASSIGNOR HEREBY GRANTS to the law firm of Foley & Lardner LLP the power and authority to insert in this Assignment any further identification which may be necessary or desirable to comply with the rules of the U.S. Patent and Trademark Office for recordation of this Assignment.

ASSIGNOR UNDERSTANDS AND AGREES that the attorneys and agents of the law firm of Foley & Lardner LLP do not personally represent ASSIGNOR OR ASSIGNOR's legal interests, but instead represent the interests of ASSIGNEE; since said attorneys and agents cannot provide legal advice to ASSIGNOR with respect to this Assignment, ASSIGNOR acknowledges its right to seek its own independent legal counsel.

NAME AND SIGNATURE OF INVENTOR
DocuSigned by:
Signature 6AED5A54F80C426
NAME: Ken Krieger
Date:
NAME AND SIGNATURE OF INVENTOR
DocuSigned by:
Signature 467CD5394FCE480
NAME: Andrew Joseph Alexander Gildfind
Date:
NAME AND SIGNATURE OF INVENTOR
DocuSigned by:
Signature 79A7AE14426B42D
NAME: Nicholas Salvatore Arini
Date:
NAME AND SIGNATURE OF INVENTOR Docusigned by:
Signature E03B6CE359EE402.
NAME: Simon Michael Rowe
Date: 7/14/2017

NAME AND SIGNATURE OF INVENTOR

DocuSigned by:

Signature

E02DE451D1D8449...

NAME: Raimundo Mirisola

Date: 10/25/2017

NAME AND SIGNATURE OF INVENTOR

Signature

B6C3D4532E8C49C...

NAME: Gaurav Bhaya

Date: 7/17/2017

NAME AND SIGNATURE OF INVENTOR

NAME AND SIGNATURE OF INVENTOR

Signature

C1E8BC80810B463...

NAME: Robert Stets

RECORDED: 10/25/2017

Page 4 of 4